

REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-20 are presently pending in this application, Claims 1, 2, 4-6 and 8 having been amended and Claims 9-20 having been newly added by the present amendment.

In the outstanding Office Action, Claims 1-8 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP 2000-340916 (hereinafter “JP ‘916”) in view of Kojima et al. (U.S. Patent 6,331,376).

Claims 1, 2, 4-6 and 8 have been amended to clarify the subject matter recited therein, and these amendments find support in the specification, claims and/or drawings as originally filed. No new matter is believed to be added thereby. Also, these amendments are not believed to narrow the scopes of the claims. If, however, the Examiner disagrees, the Examiner is invited to telephone the undersigned who will be happy to work in a joint effort to derive mutually satisfactory claim language.

Briefly recapitulating, Claim 1 of the present invention is directed to a multilayer printed circuit board and recites: “a substrate having an inner-layer conductor circuit formed inside the substrate and an outer-layer conductor circuit formed on the substrate; a strain gauge formed inside the substrate and comprising a plurality of resin films and a resistive element held between the resin films, each of the resin films comprising one of polyimide and a thermoplastic resin; a plurality of electrodes electrically connected to the resistive element and exposed from one of the resin films; and a plurality of viaholes electrically connected to the electrodes, respectively, through the one of the resin films.”

It is respectfully submitted that JP ‘916 does not teach or suggest “a strain gauge formed inside the substrate and comprising a plurality of resin films and a resistive element held between the resin films, each of the resin films comprising one of polyimide and a

thermoplastic resin” as recited in amended Claim 1. That is, JP ‘916 does not teach or suggest a strain gauge structure in which a resistive element 10 is sealed between two resin films 12, 14 made of polyimide or a thermoplastic resin as seen from the embodiment in Figure 2, for example. Instead, JP ‘916 simply shows a plain metal foil 10 provided directly between two insulating layers, not enveloped between two resin films. Thus, JP ‘916 does not disclose a strain gauge in which a resistive element is held between two resin films made of polyimide or a thermoplastic resin. Kojima et al. is directed to a photocurable resist composition and cited for polyimide. Thus, it is believed that Kojima et al. does not remedy the deficiency of JP ‘916. Therefore, the structure recited in amended Claim 1 is clearly distinguishable from both JP ‘916 and Kojima et al., and because these references do not disclose the strain gauge as recited in Claim 1, their teachings even combined would not render the structure recited in Claim 1 obvious.

Likewise, Claim 5 is directed to a testing piece for a printed circuit board and has been amended to recite: “a substrate having an inner-layer conductor circuit formed inside the substrate and an outer-layer conductor circuit formed on the substrate; a strain gauge formed inside the substrate and comprising a plurality of resin films and a resistive element held between the resin films, each of the resin films comprising one of polyimide and a thermoplastic resin; a plurality of electrodes electrically connected to the resistive element and exposed from one of the resin films; and a plurality of viaholes electrically connected to the electrodes, respectively, through the one of the resin films.” Thus, Claim 5 is also believed to be also distinguishable from JP ‘916 and Kojima et al.

For the foregoing reasons, Claims 1 and 5 are believed to be allowable. Furthermore, since Claims 2-4 and 6-20 depend directly or indirectly from either Claim 1 or 5, substantially the same arguments set forth above also apply to these dependent claims. Hence, Claims 2-4 and 6-20 are believed to be allowable as well.

In view of the amendments and discussions presented above, Applicants respectfully submit that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, L.L.P.

A handwritten signature in black ink, appearing to read 'Akihiro Yamazaki', is written over a horizontal line.

Akihiro Yamazaki
Attorney of Record
Registration No. 46,155

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 07/09)